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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,827	07/20/2000	Yang Cao	Cao-21	3535

32498 7590 10/12/2006

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EXAMINER	
LY, ANH VU H	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/619,827	CAO ET AL.	
	Examiner	Art Unit	
	Anh-Vu H. Ly	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-8,11,14-17,20-24 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20-24 and 27-30* is/are allowed.

6)☒ Claim(s) *1,5-8,11 and 15-17* is/are rejected.

7)☒ Claim(s) *4 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed August 03, 2006. Claims 1, 4-8, 11, 14-17, 20-24 and 27-30 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-8, 11, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimbashi et al (US Patent No. 6,798,779 B1). Hereinafter, referred to as Shimbashi.

With respect to claim 1, Shimbashi discloses a hybrid telecommunications switch apparatus (Fig. 4) comprising:

one or more circuit switch fabrics (Fig. 4, VT switching module 24);

one or more packet switch fabrics (Fig. 4, ATM switching module 25);

a controller (Fig. 4, centralized control module 32) configured to,

examine a SONET/SDH path overhead byte to determine which of said circuit switch fabrics or packet switch fabrics to route traffic to (Figs. 6 and 18, POH of signal must be extracted to locate ATM, IP, or DS1 traffic);

dynamically allocate circuit switch resources to ATM and IP traffic in order to route such traffic to the packet switch fabric based on said examination (col. 6, lines 32-34, if the signal includes ATM cells, it is transmitted to the shared inter-module interfaces 27-1 through 27-n, which perform ATM switching. Herein, shared inter-module interfaces 27-1 through 27-n are circuit switch resources); and

to route telecommunications traffic to one of the said circuit or packet switch fabrics based on said examination (col. 6, lines 22-34, STS switching module 23 switches the signal according to the trigger information if the signal requires to be switched, e.g., to VT or ATM switching module).

With respect to claims 5-6, Shimbashi discloses that wherein the circuit switch fabric is synchronous transport signal (STS) crossconnect and wherein the packet switch fabric is configured to switch IP or ATM traffic (Fig. 4).

With respect to claim 7, Shimbashi discloses a plurality of circuit switch fabrics (Fig. 4, VT switching modules 24 and 24').

With respect to claim 8, Shimbashi discloses that the controller is configured to examine a POH byte associated with receivd traffic and to thereby determine whether the traffic is ATM, IP, or STM traffic (Figs. 6 and 18, POH of signal must be extracted to locate ATM, IP, or DS1 traffic).

With respect to claim 11, Shimbashi discloses a method of switching telecommunications traffic in a hybrid switch including a circuit switch fabric (Fig. 4, element 24), a packet switch fabric (Fig. 4, element 25), and a controller (Fig. 4, element 32), the method comprising the steps of:

a) provisioning the circuit switch fabric for IP, ATM, and circuit switch traffic (Fig. 4, centralized control module 32),

b) examining a SONET/SDH path overhead byte to determine whether received traffic is IP, ATM, or circuit switch traffic (Figs. 6 and 18, POH of signal must be extracted to locate ATM, IP, or DS1 traffic);

c) dynamically allocating circuit switch resources to ATM and IP traffic in order to route such traffic to the packet switch fabric based on said examination (col. 6, lines 32-34, if the signal includes ATM cells, it is transmitted to the shared inter-module interfaces 27-1 through 27-n, which perform ATM switching. Herein, shared inter-module interfaces 27-1 through 27-n are circuit switch resources); and

d) switching the received traffic in the packet or circuit switch fabrics in response to the examination step b (col. 6, lines 22-34, STS switching module 23 switches the signal according to the trigger information if the signal requires to be switched, e.g., to VT or ATM switching module).

With respect to claims 15-16, Shimbashi discloses that the controller directing ATM traffic to a packet switch fabric and directing IP traffic to a packet switch fabric (col. 6, lines 22-

34, STS switching module 23 switches the signal according to the trigger information if the signal requires to be switched, e.g., to VT or ATM switching module).

With respect to claim 17, Shimbashi discloses that the controller directing traffic that is neither ATM or IP traffic to the circuit switch fabric (col. 6, lines 22-34, STS switching module 23 switches the signal according to the trigger information if the signal requires to be switched, e.g., to VT or ATM switching module).

Allowable Subject Matter

3. Claims 4 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 20-24 and 27-30 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest examine C2 overhead byte to determine which of said circuit switch fabrics or packet switch fabrics to route traffic to, as specified in independent claims 20 and 27.

Response to Arguments

5. Applicant's arguments filed August 03, 2006 have been fully considered but they are not persuasive.

Applicant argues in pages 7-8 that Shimbashi's STS POH is not the same as SONET/SDH path overhead byte.

Examiner respectfully disagrees. As is known in the art, SONET uses a basic transmission rate of STS–1 that is equivalent to 51.84 Mbps. Higher-level signals are integer multiples of the base rate. For example, STS–3 is three times the rate of STS–1 (3 x 51.84 = 155.52 Mbps). An STS–12 rate would be 12 x 51.84 = 622.08 Mbps. Further, POH stands for path overhead. Therefore, Shimbashi's STS POH is SONET/SDH path overhead byte.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl

CHI PHAM
SUPERVISORY PATENT EXAMINER 10/10/06